

It would be a week at least before we, returning, would lie off this inlet again. Such is just one case at the hospital.

Again and again we will be halted by a white flag, and a fisher-punt comes out, the cod-takers bearing some comrade, his arm wrapped round about where a hook has sunk deep into it, or some of the painful bruises and boils caused by perpetual handling of the oars occurs. Then the ship halts while the doctor completes the bandaging, and the captain and the purser swear at the fishermen on the deck.

Now and then, an Indian half-breed or an Eskimo comes aboard. Interesting studies they make,—these people of the wildwood.

Or again one of the Moravian missionaries from up as far to the north as regular vessels ply will stand in need of treatment. Then is Mr. Peddle, the nurse, very busy.

And when they are well and off again, and the ship is on the seas, he entertains the passengers with his *Whale Song*, or his *Rolling Home to Terra Nuova*, the national anthem of Newfoundland.

THE NURSE AND THE TUBERCULOUS PATIENT *

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It has been truly said, "It is no sin not to know, but it is a sin not to learn." Nothing is so perilous to progress as the wilful ignorance resulting from scanty knowledge, because fear is always allied with this condition, and the combination thus established is disastrous in the extreme to advancement along any line. The great need of to-day is knowledge, which is the birthright of every human being. Not that destructive information which only whets the idle curiosity of the people, but that which creates a legitimate desire to know for the sake of putting the acquired knowledge to a practical use in the daily life, thereby throwing out an influence which always permeates society for the good of its individual members.

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No one will question the fact that the training school of to-day has a far-reaching opportunity to become a potent factor in diminishing the spread of tuberculosis. The teachers have it within their power to instil in the minds of the pupil nurses such a practical knowledge of cause and effect as shall tend for the same wise treatment of this great scourge that is given to other diseases of a germ origin. The graduate nurse should have no greater dread of a case of pulmonary tuberculosis than she does of a septic surgical case, and to hear a trained nurse say that she would never nurse a patient having tuberculosis, because she is afraid of contracting the disease, shows one of two things: either her school failed to do its teaching duty, or she was too stupid to become an intelligent nurse.

If absence of worry, proper rest, wholesome food, and fresh air are the principal aids in battling against tuberculosis, then the nurse who maintains these conditions carries her armor with her, and is in position to do justice to herself and perform intelligent service for her patient. To emphasize what has already been said concerning the necessity for knowledge, let two facts be presented for your consideration and application. First, if the only fresh air to be had is damp air, it should not be shut out of buildings as if it were unfit to be breathed into the lungs; second, the same person who would never even think of drinking stagnant water may, and often does, make a practice of breathing stagnant air.

The consensus of medical opinion is that "incipient tuberculosis tends to recovery; that advanced tuberculosis may sometimes partially be arrested in its progress and life prolonged for a number of years; that far advanced tuberculosis, with or without mixed infection, tends to a fatal issue, and that the successful treatment and the prevention of the spread of the disease demand the earliest possible diagnosis." There are four requisites in the successful care of all tuberculous patients: a wholesome mental condition, which cannot be obtained if the patient is worried with the cares of getting his daily bread, nourishment to meet the individual needs, the maximum amount of fresh air, and systematic rest.

A climate that has the least amount of precipitation combined with enough elevation to insure a bracing atmosphere during the year is very desirable for patients in the first stages of pulmonary tuberculosis, and removal to such a climate often stimulates the patient's appetite and relieves disorders of the gastro-intestinal tract. Extreme exhaustion caused by prolonged intense heat is avoided; also complications such as pleurisy, which is frequently brought on by extreme cold and prolonged dampness, and profuse night-sweats, are often entirely relieved. The

practice of sending all patients, regardless of the extension of the ravages of the disease, on a long exhausting journey, and with perhaps no surety of proper accommodations, at least immediately on their arrival, cannot be too strongly condemned. Those patients who have extensive lung involvement, run high temperatures, and are greatly emaciated should be kept and cared for in or near their own homes.

Fresh and uncontaminated air in abundance is very essential to the improvement of a tuberculous patient, since the solid portions of the lungs have extra work thrown upon them. A porch to remain on the greater portion of the day and to be used at night for sleeping purposes is a necessity, and it will add to the comfort and progress of the patient if the exposure is such as to give the maximum amount of sunshine in the winter with the minimum amount in the summer, as is obtained in this country by facing the south. If the occupant of the porch be a bed patient, screens add greatly to his comfort in the summer time. Mosquito netting drawn tightly over the bed proves a very good substitute. At all times of the year canvas curtains or sliding glass windows are needed for protection against winds and storms. Except in cold weather, the direct rays of the sun are too powerful in Colorado for a sick person to remain in for any length of time. Certain cases are benefited by exposing the bare chest to the sun from three upwards to ten minutes, but this should only be done according to the direction of the physician. Large assemblages should be avoided on account of the contaminated air which the patient is forced to breathe and the excitement caused by the nervous strain which attendance produces.

The best food is demanded, and three meals during the day, with liquid nourishment given once between meals, seems to give better results than more frequent feeding. Forced feeding is not so favored now as formerly, because the fight against the disease is long, and no patient can stand an abnormal quantity of food for any length of time. The method of giving a reasonable amount of nourishment, such as the stomach will tolerate for months, seems to give the most beneficial results. Rare meats, especially beef, eggs, butter, cream, and milk are the important items in the diet, and they should be eaten three times a day, if possible, besides three ounces of beef juice taken twice daily. Eggs are very important and may be taken raw or cooked in any way except hard boiled or fried. If the patient eats three fairly good sized meals, a raw egg being taken whole with a little salt or cream on it directly after the meal and liquid nourishment such as beef juice, egg nog, or milk twice or three times during the day, he is getting sufficient nourishment. In the event of the patient having a poor appetite for his regular meals, two eggs

should be given three times each day and enough liquid nourishment added to make up for the lack of solid food. A pint of milk containing as much cream as will be digested should be taken with each meal until the normal weight is regained, when the quantity may be diminished. Fruits and vegetables that contain much acid should be used with discretion since the system of a tuberculous patient gives a decided acid reaction. Cooked fruits are preferable to uncooked, since the latter have a tendency to cause intestinal disorders. Coffee, tea, and all stimulating drinks should be used moderately. A patient may thrive on a diet which does not include meat, though such a diet is more bulky and, if the digestion is poor, may tax the patient's system greatly. The meat-free diet may appeal to patients of limited means, since it can be purchased at less cost. However, to be palatable, it is necessary to prepare a vegetable diet in a careful and appetizing way.

It is essential that the organs be kept acting as near the normal as possible. Cathartics, at least occasionally, are necessary, especially cholagogues and hepatic stimulants. Free drinking of water helps greatly in ridding the system of poisons. A glass or two of warm water before breakfast helps to dissolve and carry off the mucus that has collected in the stomach during the night.

A tub bath, if the patient is able, otherwise a sponge bath twice a week, with a light alcohol rub every evening, keeps the skin in good condition. A cold sponge over the chest in the morning stimulates the respiratory organs. Shower baths are also very beneficial for those who are strong enough to take them. When expectoration diminishes in quantity and the patient complains of a tightening in the chest, the temperature will rise because absorption has taken place from the retained sputum. Generally some emollient preparation applied freely will in a few hours increase the amount of the expectoration and thereby reduce the temperature. Occasionally expectorants are necessary. Slight sweating now and then is not harmful; on the contrary, it may be helpful in ridding the system of poisons. Profuse and frequent sweating is weakening, and a rub with strong alcohol or a sponge with vinegar will often greatly relieve this condition.

Complete rest and freedom from all responsibility are essential to a patient suffering from pulmonary tuberculosis. After the patient is completely rested and the routine is likely to become monotonous, some light and suitable recreation may be planned. It is impossible to give any set rules for rest and recreation, since each patient is affected differently. A short walk may cause one patient's temperature to rise, whereas it may have the opposite effect upon another. Only general rules

can be given and they should be applied with discretion. For patients running a normal temperature, rest in a recumbent posture one hour before and after each meal may be ample. Reading, a walk of gradually increasing length twice daily, short drives, quiet games, and light work, such as may be carried on in the open air and not require much physical exertion, are all permissible if the patient does not get too tired. In some cases a course of study wisely carried on may be taken without harm. If the patient runs a slight evening temperature, continuous rest is advisable with, possibly, a short walk in the morning, and reading at short intervals during the day. If the patient has a temperature most of the day, continuous rest in bed is necessary and very little company is advisable. If the temperature is 102° or over, a tepid sponge or light alcohol rub is cooling and helps to relieve the nervousness which generally accompanies the fever. It is essential that the patient's feet be kept comfortably warm, cold feet being characteristic of the disease. Emaciated patients often find comfort in an oil rub following the alcohol rub. The rubbing is soothing and creates a good mental impression, causing the patient to think he is increasing in weight, which is a favorable symptom. It is well to discourage patients from discussing their symptoms either among themselves or with relatives or friends. It has a depressing effect, whereas they should be kept cheerful and interested in things apart from themselves. In case of hemorrhage, even though slight, the patient should be kept quiet and the orders of the attending physician strictly adhered to. If profuse, and the physician cannot be gotten immediately, put the patient to bed, apply an ice bag to the chest, and give morphine, gr. $\frac{1}{16}$ to $\frac{1}{4}$ hypodermically. Stop all nourishment and give only enough water or chipped ice to keep the mouth moist.

The patient and those caring for him should be extremely careful that he does not infect himself and those living with him. Since the sputum contains the germs of pulmonary tuberculosis, too great care cannot be taken in handling and disposing of it. There are very few perfectly reliable methods of destroying the sputum of tuberculosis. Incineration is probably the most commonly practiced and the most effective. A 4 per cent. solution of sodium bicarbonate, which raises the boiling point to 102° Centigrade and prevents the coagulation of albumin, is efficient. It has been stated that a 2 per cent. solution of chloride of lime is a practical method. If possible, use metal cups, the impervious paper holder of which can be burned and the metal cup itself boiled, or the impervious paper pocket cups which may be burned after using a few times. Cuspidors and metal boxes require some disinfectant in them,

such as a 10 per cent. carbolic acid solution, and should be cleansed with hot soapsuds and disinfected with pure carbolic acid. Soiled cloths should be disposed of by burning. The patient should hold his handkerchief over his mouth when coughing, to prevent particles of sputum from flying beyond the cup. If a visible amount of sputum does escape it should be removed with a cloth, which should be immediately burned, and the area upon which it fell sponged with a 10 per cent. solution of carbolic acid, letting some of this stand on the spot, if possible, for some time. Male patients should be urged to keep the face shaven.

The most suitable rooms for patients have plain walls with a hard finish that may be washed down every few months; also all ordinarily sharp angles should be rounded. The floors should be hard finished, and the rugs washable. Many pictures on the wall are not advisable, because dust may collect. All brushing and dusting should be done with moistened articles. The room and clothes of a patient should be fumigated occasionally. Upon the patient's departure, the rooms he occupied require thorough cleaning and fumigating. There are several methods of reliable fumigation, permanganate of potash and formaldehyde being the substances in most common use for this purpose.

In conclusion, let it be said that the tubercular work organized and carried on by the nursing staffs of a number of hospitals shows that these institutions have begun to realize their debt, not alone to the public at large but to the nurses under their especial training. It now remains for the individual trained nurse to perform her duty to the rank and file of the nursing profession by spreading the knowledge of prevention and cure through the channels of her alumnae, local, and state societies.

THREE CASES

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I

A MAIDEN lady, seventy-two years old, alone in a five-room house which had been left to her for life by people whom she had served as housekeeper, was sick with pneumonia, which followed an attack of grippe. A sister, sixty years old, had cared for her until she, too, was stricken by grippe. She was fortunate in having a daughter in good circumstances with whom she lived.

I found the patient on a cot in the middle room of the first floor. The kitchen, just off this room, was in a most filthy condition, filled